

Rigel Alves

Mechanical Engineer

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Toulouse, France

PROFILE

Mechanical Engineer, specialized at numerical simulation, with a strong passion towards aerospace-related matters (especially aerospace propulsion and aerodynamics) and a solid international background.

EXPERIENCE

ISAE-SUPAERO

France

2022 > current

Post-doctorate: Project Inpro

- Airbus project
- CFD simulations of open rotor aircraft engines
- IC3 code (C++)
- aeroacoustic analysis and optimisation

University of Dresden

Germany

2017 > 2022

Doctorate: Project Prestige

- Rolls-Royce project
- CFD simulations of jet aircraft engines
- Hydra code (Fortran)
- code performance analysis and optimisation
- developing in Onera, DLR and Airbus' CFD code, CODA (C++)

SENAI-CIMATEC

Brazil

2016 > 2017

Research

- CFD simulations of Delft III flame
- Ansys Fluent code

QGECE

Australia

2014 > 2015

Research

- CFD simulations of supercritical CO₂ thermodynamic loop
- OpenFOAM code (C++)

EDUCATION

Federal University of Bahia

Brazil

2011 > 2016

Degree of Mechanical Engineering (5 years)

- CFD simulations of supersonic rocket
- OpenFOAM code (C++)
- 1 semester abroad in University of Newcastle, Australia
- 1 year abroad in University of Queensland, Australia
- 2 semesters abroad in Technical University of Prague, Czechia

LANGUAGES

Portuguese

English

Spanish

German

French

SKILLS

Windows

Linux

C++

Python

Fortran